ENVIRONMENTAL CHEMISTS

Date of Report: 11/02/98 Date Received: 10/22/98

Project: Metro Self Monitor, PO# M77487

Date Samples Extracted: 10/28/98 Date Extracts Analyzed: 10/29/98

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID	Chromium	Copper	<u>Nickel</u>	Zinc
M77487	0.76	0.33	0.61	< 0.05
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

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Project: Metro Self Monitor, PO# M77487

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 810074-01 (Duplicate)

				Relative	
공료 방문으로 시스템 하다.	Reporting	Sample	Duplicat	e Percent	Acceptance
Analyte	Units	Result	Result	Difference	Criteria
Chromium	mg/L (ppm)	0.76	0.76	0	0-20
Copper	mg/L (ppm)	0.64	0.58	10	0-20
Nickel	mg/L (ppm)	0.66	0.63	5	0-20
Zinc	mg/L (ppm)	0.17	0.18	6	0-20

Laboratory Code: 810074-01 (Matrix Spike)

		Reporting	Spike	Sample	% Recov	ery % Recov	ery Acce	eptance		
Analyte	1.4.1	Units	Level	Result	MS	MSD	Cri	iteria	RPD	
Chromium		mg/L (ppm)	5	0.76	105	104	80)-120	1	_
Copper		mg/L (ppm)	5	0.64	87	88	80	-120	1	
Nickel		mg/L (ppm)	10	0.66	104	105	80	-120	1	
Zinc		mg/L (ppm)	5	0.17	113	115	80	-120	2	

Laboratory Code: Laboratory Control Sample

	Reporting	Spike	~% Recove	ry % Recove	ry Acceptanc	e e	
Analyte	Units	Level	LCS	LCSD	Criteria	RPD)
Chromium	mg/L (ppm)	5	106	106	80-120	0	
Copper	mg/L (ppm)	5	101	100	80-120	1	
Nickel	mg/L (ppm)	10	108	108	80-120	0	
Zinc	mg/L (ppm)	5	111	111	80-120	0	

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

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/Mm 10.22.98 Pm

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10/22/98

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

November 2, 1998

DUPLICATE COPY

INVOICE #98ACU1102-1

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M77487: Results of testing requested by Gerry Thompson for material submitted on October 22, 1998.

1 water sample analyzed for Chromium, Copper, Nickel, and Zinc using Method 6010 @ \$65 per sample \$ 65.00

Amount Due \$ 50.00

FEDERAL TAX ID (b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

November 2, 1998

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on October 22, 1998 from your Metro Self Monitor, PO# M77487 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Marti Project Manager

Enclosures ACU1102R.DOC